

What is claimed is:

1. A compressed or uncompressed audio data feature description method, wherein

audio features are hierarchically represented by  
5 setting an audio program which means entire audio data  
constructing one audio program at the highest hierarchy and  
describing the audio features in a order from higher to lower  
hierarchies.

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2. A compressed or uncompressed audio data feature description method according to claim 1, wherein

said hierarchies are represented by one or more audio  
programs having a semantically continuous content and at  
15 least either an audio scene or an audio shot.

3. A compressed or uncompressed audio data feature description method according to claim 1, wherein

20 said hierarchy is described by at least a name of the hierarchy, audio data type, feature type and feature value which is represented by audio segment information classified according to the feature types.

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4. A compressed or uncompressed audio data feature description method according to claim 2, wherein

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said hierarchy is described by at least a name of the hierarchy, audio data type, feature type and feature value which is represented by audio segment information classified according to the feature type.

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5. A compressed or uncompressed audio feature description method according to claim 3, wherein  
10 said audio segment information are described by any of time codes for start time and end time, time codes for start time and duration, a start frame number and an end frame number, or a start frame number and number of frames corresponding to duration.

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6. A compressed or uncompressed audio data feature description method according to claim 4, wherein  
10 said audio segment information are described by any of time codes for start time and end time, time codes for start time and duration, a start frame number and an end frame number, or a start frame number and number of frames corresponding to duration.

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7. A compressed or uncompressed audio data feature description method, wherein  
feature values of the audio program are represented

by an audio thumbnail indicating either one or more audio pieces or images;

the audio thumbnail is declared and described as the feature type;

5 if the audio thumbnail is the audio pieces, one or more audio segment information of audio pieces are described; and

if the thumbnail is the images, one or more file names of the images are described.

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8. A compressed or uncompressed audio data feature description method, wherein

15 feature values of at least one audio scene or at least one audio shot are represented by an audio clip which is at least one audio piece having an arbitrary length equal to or shorter than that of the audio scene or the audio shot, respectively.

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9. A compressed or uncompressed audio data feature description method according to claim 8, wherein

25 at least one audio clip representing characteristic of said audio scenes or audio shots is represented as the key audio clip.

10. A compressed or uncompressed audio data feature description method according to claim 9, wherein the key audio clip is declared and described as a feature type;

5 if an audio data type of the key audio clip is voice, a voice representing characteristic of the key audio clip is represented as the key word and the content of the key word is described by text information; and  
10 at least one audio segment corresponding to the key word is described.

11. A compressed or uncompressed audio feature description method according to claim 9, wherein  
15 the key audio clip is declared and described as a feature type;

if an audio data type of the key audio clip is music, a music representing characteristic of the key audio clip is represented the a key note; and  
20 at least one audio segment corresponding to the key note is described.

12. A compressed or uncompressed audio data feature description method according to claim 9, wherein  
25 the key audio clip is declared and described as a feature type;

if the audio data type of the key audio clip is sound,  
a sound representing characteristic of the key audio clip  
is represented the key sound; and  
at least one audio segment corresponding to the key  
5 sound is described.

13. A compressed or uncompressed audio data feature  
description method, wherein  
10 if audio data consists of multiple channels or tracks,  
a representative channel or track of the audio data is  
represented as a key stream;  
the key stream is declared and described as a feature  
type; and  
15 an audio segment corresponding to the key stream is  
described.

14. A compressed or uncompressed audio data feature  
description method, wherein  
20 audio data representing a representative event in audio  
data is represented as the key event;  
the key event is declared and described as a feature  
type;  
25 a content of the key event is described by text  
information; and  
at least one audio segment corresponding to the key

event is described.

15. A compressed or uncompressed audio data feature  
5 description method, wherein

audio data from a representative audio source in audio  
data is represented as the key object;

the key object is declared and described as a feature  
type;

10 a content of the key object is declared and described  
by text information; and

at least one audio segment corresponding to the key  
object is described.

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16. A compressed or uncompressed audio data feature  
description method, wherein

at least one introduction or representative audio piece  
of an audio program, an audio scene or an audio shot is  
20 represented as an audio segment;

a sequence of the audio segments is represented as an  
audio slide;

the audio slide is declared and described as a feature  
type; and

25 the audio segments constructing the audio slide are  
described.

17. A compressed or uncompressed audio data feature description method, wherein

5 at least one introduction or representative audio piece of an audio program, an audio scene or an audio shot is saved as an audio file;

10 a sequence of the audio files is represented as an audio slide;

15 the audio slide is declared and described as a feature type; and

file names of the audio files constructing the audio slide are described.

15 18. A compressed or uncompressed audio data feature description method, wherein

if feature type is one of a shot, a key audio clip, a key word, a key note or a key sound, value indicating level of the feature types is described; and

20 audio data for multiple feature types are described hierarchically according to the level values.

19. A compressed or uncompressed audio video data feature description collection construction method, wherein

feature descriptions based on multiple feature types

are associated with individual audio video programs;  
the feature descriptions are extracted from multiple  
audio video programs based on a specific feature type;  
a feature description collection is constructed by  
5 using multiple extracted feature descriptions; and  
the feature description collection is described as a  
feature description collection file.

10 20. A compressed or uncompressed audio video data  
feature description collection construction method  
according to claim 19, wherein  
the feature type is a summary type;  
summary descriptions associated with the individual  
15 audio video programs are extracted from multiple audio video  
programs based on a specific summary type;  
a summary collection is constructed using multiple  
extracted summary descriptions; and  
the summary collection is described as a summary  
20 collection file.

21. A compressed or uncompressed audio video data  
feature description collection construction method  
25 according to claim 19, wherein  
as element for describing the feature description  
collection in the feature description collection file, the

feature types for constructing the feature description collection and contents of the feature types are described at a higher level; and

5 identifiers of the audio video programs referred to by each feature description and specification of each segment information in the audio video programs are described.

22. A compressed or uncompressed audio video data  
10 feature description collection construction method according to claim 21, wherein

if the feature is a summary of audio video data, summary types for constructing the summary collection and contents of the summary types are described at a higher level as  
15 elements for describing the summary collection in the summary collection file;

identifiers of the audio video programs referred to by each summary description and specification of segment information of each summary in the audio video programs are  
20 described at a lower level.

23. A compressed or uncompressed audio video data feature description collection construction method  
25 according to claim 19, wherein

the feature types for constructing the feature description collection and contents of the feature types

are described altogether in a nested structure, whereby the feature description collection can be constructed and described based on different feature types, or based on different contents of feature types among the same feature  
5 type.

24. A compressed or uncompressed audio video data  
feature description collection construction method  
10 according to claim 21, wherein

the feature types for constructing the feature  
description collection and contents of the feature types  
are described altogether in a nested structure, whereby the  
feature description collection can be constructed and  
15 described based on different feature types, or based on  
different contents of feature types among the same feature  
type.

20 25. A compressed or uncompressed audio video data  
feature description collection construction method  
according to claim 20, wherein

the summary types for constructing the summary  
collection and contents of the summary types are described  
25 altogether in a nested structure, whereby the summary  
collection can be constructed and described based on  
different summary types or based on different contents of

summary types among the same summary type.

26. A compressed or uncompressed audio video data  
5 feature description collection construction method  
according to claim 22, wherein

the summary types for constructing the summary  
collection and contents of the summary types are described  
altogether in a nested structure, whereby the summary  
10 collection can be constructed and described based on  
different summary types or based on different contents of  
summary types of the same summary type.